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# MICROWAVE COLLOCATION

Where technically feasible, BellSouth will provide for physical collocation of the CLEC's microwave equipment on the roofs of BellSouth's Central Office Buildings. Such equipment will be limited to that necessary for interconnection of the CLEC's network facilities to BellSouth's network or access to BellSouth's unbundled network elements.

Microwave Collocation includes placement of supporting masts, non-penetrating roof mounts ("NPRM"), penetrating pipe stands, parapet mounts, and microwave antenna (e) on the roof top or other suitable exterior spaces of BellSouth's Central Offices and does not include the construction of towers. The CLEC may, upon request, place a Global Positioning System (GPS) antenna and cabling on the roof pursuant to Section 12 of this Attachment.

The Parties will work together to determine the preferable type of antenna mount reasonably considering such factors as permitting requirements, roof maintenance issues and any other relevant factors. If applicable, BellSouth will provide a copy of the original FAA air space studies on the requested building including the FAA license application. In the event an FAA air space study does not exist, the CLEC may file an FAA air space study on the building where the microwave arrangement is being requested. BellSouth shall have final approval of the type of antenna mount. The Parties agree that the elements listed below reflect requirements for Microwave Collocation, which shall be provided in accordance with the rates, terms and conditions set forth below. The Parties acknowledge that Microwave Collocation requires unobstructed line-of-sight. Unobstructed line-of-sight will be provided by BellSouth where technically feasible but is not guaranteed to be available. The CLEC accepts the responsibility of determining unobstructed line-of-sight at any location where The CLEC applies for Microwave Collocation.

#### 1. PROVISIONING PROCESS AND FEES

# A. Initial Site Visit

The CLEC will provide a Site Visit Request to BellSouth, in writing, setting forth the names of the BellSouth Central Office Buildings(s) the CLEC wishes to visit for potential Microwave Collocation. Such site visit consists of the CLEC's representatives and appropriate BellSouth personnel visiting a BellSouth Central Office building for the purpose of determining whether an unobstructed line-of-sight is technically feasible. The CLEC will be responsible for making an unobstructed line-of-sight determination. Such Site Visit does not obligate the CLEC to request, or BellSouth to provide, Microwave Collocation on the site. The site visit will take place within fifteen (15) business days of receipt by

BellSouth of the CLEC's Site Visit Request or as soon thereafter as can be scheduled by the Parties.

The CLEC will submit a Site Visit Request Fee as specified in Exhibit B, and will pay for the reasonable cost BellSouth incurs for travel, if necessary which BellSouth shall provide the CLEC advance notice of, for each site requested with each Site Visit not to exceed two hours. Charges for site visits that take longer than two (2) hours will be charged by BellSouth to the CLEC at BellSouth's loaded labor rates on a per hour basis in addition to the Site Visit Request Fee. BellSouth will make every effort possible to use resources near the requested location to minimize travel required. If BellSouth determines that airline travel is required, BellSouth will contact the CLEC in an effort to discuss possible alternatives.

# **B.** Microwave Collocation Application

This provision shall coincide with provisions under Section 6 and 7 of Attachment 4 of this Agreement.

BellSouth will respond to Microwave Collocation Application(s) pursuant to Section 6 of Attachment 4 of this Agreement.

The CLEC shall submit the Application and Inquiry document and appropriate collocation application fee pursuant to BellSouth's FCC #1, Section 20 tariff (for virtual) or Section 7 of Attachment 4 of this Agreement, in addition to a Microwave Collocation Attachment for each central office building where the CLEC seeks Microwave Collocation. This application and fees will apply both to space on the roof as well as space inside the BellSouth central office.

The CLEC shall provide BellSouth with the following data on the application to the extent available recognizing that certain information may change depending on the final determination of the location providing line of sight:

- • Type of antenna mount (pipe, NPRM)
- Type of equipment to be collocated within the CLEC's case (vendor, capacity)
- • Line of sight requirements (Azimuth)
- Relevant information includes: Station Name, Call Sign, Latitude and Longitude in NAD 83, Primary Antenna Type, Equipment Type, Equipment Emission, Power (dBm/Watts), Receive Level (dBm), EIRP (dBm/Watts), Transmit Frequency (MHz)
- Weight and configuration

• Other relevant information as identified at the initial site visit.

Roof Inspection: BellSouth may require a roof inspection at any site where the CLEC requests Microwave Collocation. The CLEC will bear the reasonable cost of the inspection including reasonable travel cost if any. BellSouth intends to use an independent contractor which may be accompanied by BellSouth personnel. The roof inspection fee shall be assessed on an individual case basis unless negotiated as a flat rate by the Parties. Such Roof Inspection does not obligate BellSouth to provide Microwave Collocation on the site.

If BellSouth concludes that rooftop/exterior space which provides the CLEC with unobstructed line-of-sight does not appear to be technically feasible, BellSouth will provide the CLEC a written explanation of such technical infeasibility within thirty (30) business days of BellSouth's receipt of the collocation application including those cases where BellSouth's known business plans provide for or include an addition to the building which would impact the line of sight. This explanation will be included in the response to the CLEC's application.

Escorted access to the roof will be provided as necessary by BellSouth pursuant to sub-Section 7.5 of Attachment 4 of this Agreement.

BellSouth or its designated subcontractors shall perform all necessary work associated with the Microwave Collocation arrangement involving power and building modifications unless otherwise agreed to by the Parties. All work performed shall be done by a BellSouth certified vendor as referenced in provision 6.8 of Attachment 4 of this Agreement unless the Parties agree that another certified vendor will be used. The Parties acknowledge that the CLEC may become a certified vendor.

If rooftop/exterior space is available BellSouth shall provide the CLEC an estimate for such microwave collocation as described more fully in provision 1.C at the same time BellSouth provides its interior collocation space quote.

# C. Preparation of Estimate / Application Response

Within thirty (30) business days of receiving from the CLEC a single complete and accurate Application and Inquiry document, BellSouth will provide, as more fully described below, an estimate including an estimate for the Monthly Recurring Charges pursuant to the rates and terms set forth in BellSouth's FCC #1, Section 20 tariff for virtual collocation, or in Exhibit 4C of this Agreement.

The estimate shall reflect the specifications submitted by the CLEC and may change based on the actual field conditions encountered during construction.

(a) The Estimate /Application Response shall set forth separate estimated charges for the following work related to the installation of the Microwave Antenna Arrangement.

# (i) Architectural Plan and Structural Review:

This shall be the reasonable sum of hourly charges of BellSouth Architects or its contractors necessary to review the plans for the Microwave Collocation Arrangement. This will include applicable consulting charges and fees for reviewing permitting material and/or assisting the CLEC in the permitting process to the extent required.

# (ii) **Permitting Review**:

This shall be the sum of the hourly charges of BellSouth Property and Services Management and/or Project Managers whose time was reasonably necessary and actually spent reviewing permitting material and/or assisting the CLEC in the permitting process. BellSouth shall have final approval authority on all proposed conditions, (which shall not be unreasonably withheld) imposed by relevant jurisdictions and BellSouth shall have the right to be represented at all hearings in connection with governmental approvals.

# (iii) Exterior (and Related Interior) Building Modification Work:

BellSouth will include a quote for BellSouth to perform coring within the Central Office, roof strengthening or any other exterior or related interior building modification that may be required.

#### (iv) Supervision of General Contractor:

This shall be the reasonable sum of the hourly charges, if necessary, of any BellSouth Property and Services Management personnel, Consultants, or Project Managers who monitor the Microwave Antenna Support Structure installation performed by the CLEC's contractor. The level of BellSouth's personnel or consultants shall be commensurate with the requirements for supervising the project and monitoring construction.

# (v) Special Security Construction:

If BellSouth demonstrates that new secure access to the Microwave Collocation location is reasonably necessary, the costs associated with the construction of such access shall be described on a separate schedule to be provided by BellSouth to the CLEC.

# (b) Recurring Charges

These consist of:

(i) Monthly Recurring Roof-Top Space Rental Fee:

The Monthly Recurring Roof-Top Space Rental Fee shall be on a per square foot basis with a minimum of 12 square feet per microwave arrangement as set forth in this Attachment in Exhibit B. The CLEC is limited building and structural support constraints for determining the number of antenna (e) which can be placed on a roof mount, pipe stand, or parapet mount. The diameter of the microwave antenna (e) will be subject to a height limitation of twenty (20) feet above the building or point of attachment, subject to line-of-sight, safety, and structural engineering guidelines, (e.g., weight, wind load). Such equipment will be subject to a structural analysis to be performed by a BellSouth Certified Structural Engineer at the CLEC's sole expense, to ensure that the equipment does not overload the building structure. If any structural reinforcement is required in order to accommodate the placement of the requested diameter and height of such microwave antennae, the CLEC will not be allowed to place such microwave antenna (e). The CLEC agrees that the height of the structure will be no greater than the minimum required to accommodate line of sight requirements. At no time shall an antenna (e) be directed across open roof space without approval of BellSouth which shall not be unreasonably withheld.

The billing for the Rooftop Space Rental Fee shall begin the date the interior and rooftop space preparation activities are complete and the space is made available to the CLEC, or the date the CLEC first begins the Rooftop microwave equipment installation, whichever is sooner. BellSouth will work with the CLEC to avoid unreasonable time differences between the completion of rooftop space preparation and interior collocation space construction.

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All estimates shall be valid for thirty (30) days from issuance, and the CLEC shall accept, reject or request changes within such time period, unless an extension is requested in writing by the CLEC and agreed to by BellSouth. Such extension will not exceed thirty (30) days unless otherwise agreed to by the parties. To accept an estimate, the CLEC shall so state in writing and shall pay BellSouth 50% of the total estimated charges ("Initial Payment") with the balance of the actual charges due upon completion of the Microwave Collocation area and any necessary supporting electrical or building modification work Payment requirements will be commensurate with Section 7.1 of Attachment 4 of this Agreement.

# D. Pre-Design Meeting

Unless otherwise agreed to by the Parties, a joint planning meeting or other method of joint planning between BellSouth and the CLEC will commence within a maximum of 15 business days from BellSouth's receipt of a Bona Fide Firm Order and the payment of agreed upon fees. At such meeting, the Parties will agree to the preliminary design of the Microwave Collocation Space and the equipment configuration requirements as reflected in the Application and affirmed in the Bona Fide Firm Order. The Collocation Space Completion time period will be provided to the CLEC during the joint planning meeting or as soon as possible thereafter. BellSouth will complete all design work following the joint planning meeting. This will be the same meeting that takes place for the interior collocation arrangement.

# E. Equipment and Testing:

The CLEC shall be responsible for providing, at its sole expense, the antenna (e), coaxial cable, brackets, connectors, support structure, grounding and bonding materials, and weather-proofing materials for such support structure or antenna (e) required for the Microwave Collocation. The CLEC shall also be solely responsible for final adjustments (e.g., pointing) of the antenna (e).

# F. <u>Use Permits</u>:

The CLEC shall be responsible for obtaining all relevant Use Permits (Ups) and shall bear all costs and fees. The CLEC shall regularly apprise BellSouth of the status of such permitting and consult with BellSouth as reasonably necessary.

#### 2. NO PROPERTY RIGHT CONFERRED

Notwithstanding anything contained herein to the contrary, Microwave Collocation shall not confer or be deemed to confer any property interest or right in BellSouth's property, and the CLEC hereby acknowledges that the rights conferred hereunder

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shall constitute merely a non-exclusive license to use a portion of BellSouth's property solely for the purposes set forth herein. A limit of two (2) the CLEC Microwave Collocation arrangements per Central Office will be permitted unless otherwise agreed to by the Parties.

Title to the CLEC's Microwave Collocation equipment shall remain in the CLEC as the property of the CLEC and shall not become fixtures to BellSouth's property.

#### 3. RESPONSIBILITY OF THE PARTIES

- A. The CLEC shall obtain and BellSouth will provide assistance as necessary to obtain any and all applicable and necessary permits, variances, licenses, approvals and authorizations from the governmental agencies with jurisdiction, including without limitation, use permits and buildings permits. FCC licenses and FAA approval, if required, to operate and maintain the CLEC's facilities during the Term of this Agreement.
- B. Where BellSouth performs any of the work pursuant to the quotes set forth in 1.C.(2)(a), BellSouth shall select the architect, engineers, surveyors, contractors, suppliers, consultants and subcontractors which may be necessary to develop plans, furnish materials and equipment, and perform construction work. BellSouth shall manage all such work in accordance with the plans and specifications approved by the Parties, all applicable laws, codes and regulations, and shall require that all contractors perform their work in a good workmanlike manner. BellSouth shall require that all BellSouth Contractors include the CLEC as an ADDITIONAL INSURED to any policies of insurance maintained by the Contractor for purposes of the work, and shall indemnify the CLEC from losses, costs and expenses incurred as a result of contractor's work. The CLEC hereby acknowledges and agrees that BellSouth shall not be liable for the work performed, material, supplies, or work products furnished by any contractor, and that the CLEC shall look solely to the contractor and any warranties, indemnification or insurance furnished by such Contractor, waiving and releasing BellSouth from any claim or liability therefrom except to the extent of the negligence or willful misconduct of BellSouth in the performance of its project management activities.
- C. Notwithstanding any other provision of this Attachment, the CLEC hereby acknowledges that BellSouth may have existing wireless communications facilities of its own or of other tenants or licensees on or at BellSouth's Central Office, and/or BellSouth may desire from time to time throughout the term of this Agreement to enter into agreements with other wireless communications providers for the installation, operation and maintenance of communications facilities on or at BellSouth's Property ("Other Wireless Carriers"). The CLEC shall cooperate with BellSouth and all Other Wireless Carriers so as to reasonably

accommodate the needs and requirements of such Other Wireless Carriers with respect to the installation, operation, use and maintenance of their equipment and facilities, and all necessary alterations, modifications and other improvements to BellSouth's property, including utility connections and access. Subject to ownership of any exclusive frequency rights, the CLEC's facilities shall not physically, electronically, or inductively interfere with the existing BellSouth or other customers' or tenants' existing facilities. Each transmitter individually and all transmitters collectively at a given location shall comply with appropriate federal, state, and/or local regulations governing the safe levels of RF radiation. The foregoing obligations shall apply equally to all Other Wireless Carriers.

- D. In the event the CLEC desires to relocate any of its then-existing Microwave Collocation facilities to a different place on the relevant BellSouth Central Office rooftop, the CLEC shall submit a new application with fee to BellSouth specifying the new location the CLEC proposes to occupy. If the relocation does not require BellSouth to expend capital, then a Subsequent Application fee will apply as covered in Exhibit A.
- E. BellSouth shall, within thirty (30) business days of receipt of a complete application, approve such relocation or describe, in writing, why such relocation is not technically feasible.
- F. The CLEC's Insurance Obligations

Pursuant to Section 8 of Attachment 4 of this Agreement.

G. At its sole cost and expense, the CLEC shall maintain the CLEC's Microwave equipment, including without limitation, all necessary repairs, replacements and restorations. In addition, the CLEC shall keep its Microwave Collocation space in a good, neat, sanitary and workmanlike condition. If the CLEC shall fail to keep its Microwave Collocation space in such workmanlike condition after ten (10) days written notice from BellSouth, BellSouth shall have the right but not the obligation to clean up the space on the CLEC's behalf. In such event, the CLEC shall be liable to BellSouth for the reasonable and demonstrable cost of such work.

#### 4. SECURE ACCESS

Pursuant to Section 11 of Attachment 4 of this Agreement.

#### 5 CABLE PROVISIONING

The CLEC is responsible for providing, running, and maintaining the cable from the radio frequency (RF) equipment to the collocation cage through the use of a

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BellSouth Certified Vendor. The Parties will discuss the proposed point of entrance in an attempt to mutually agree upon a point of entrance provided, however, that it will be in BellSouth's final discretion to designate the point of entrance of the cable from the roof into the BellSouth Central Office building. BellSouth will be responsible for providing any necessary cable support structure at a rate indicated in Exhibit B. A BellSouth consultant must approve how the cable will be run.

#### 6. LINE OF SIGHT

BellSouth will manage roof space on a first-come /first-served basis. BellSouth will work cooperatively with the CLEC in determining suitable space for the CLEC equipment. Once the parties mutually determine an initial location which provides for line of sight pursuant to 1c) above, the CLEC is guaranteed a clear line of sight from the antenna mount and the edge of BellSouth's roof line. If BellSouth requires a building enhancement modification or through the placement of additional equipment obstructs the CLEC's existing line of sight, BellSouth will work with the CLEC to move the antenna mount or raise the height of the antenna mount for a clear line of sight prior to the obstruction occurring. The costs of this modification will be borne by BellSouth.

If a third party elects to place equipment on the roof that obstructs an existing line of sight, the third party application will be denied unless all three parties mutually agree to move an existing arrangement to allow for a clear line of sight. The costs of this application will be borne by the third party.

#### 7. ANTENNA MODIFICATIONS

The CLEC is limited to building and structural support constraints for determining the

number of antenna (e) which can be placed on a roof mount, pipe stand, or parapet mount. The CLEC must submit an application with a fee before adding additional equipment to the microwave collocation space or to move equipment outside of designated space. The CLEC may not construct improvements or make Major Alterations to its rooftop space or microwave transmission facilities without prior written approval from BellSouth, which will not be unreasonably withheld. BellSouth shall respond to any single request (application) within thirty (30) business days. "Major Alterations" shall include but not be limited to: (i) additional construction by the CLEC of support equipment within its rooftop space, (ii) any modification to the rooftop space. "Major Alterations" shall not include (i) replacement of mounted equipment with like-sized and weight or smaller mounted equipment or similar functionality, (ii) routine repairs and maintenance to such microwave transmission facilities. Additional equipment or movement of existing equipment will require a new application and application fee Anything outside of

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normal maintenance may require a subsequent application fee as indicated in Exhibit 4C of Attachment 4 of this Agreement.

# 8. USE OF ANTENNA SPACE ON OTHER BELLSOUTH TOWERS

Requirements for antenna space on existing towers that are not part of a BellSouth central office will be handled through BellSouth's Master Licensing Process.

# 9. EQUIPMENT REMOVAL

If, at any time, BellSouth reasonably determines that any of the CLEC's facilities or equipment or the installation of the CLEC's facilities or equipment does not meet the requirements outlined in this Agreement, the CLEC will be responsible for the costs associated with the removal of such facilities or equipment or modification of the facilities or equipment or installation thereof to render it compliant. The removal of equipment must be done by a BellSouth Certified Vendor unless the Parties agree that another certified vendor can be used. If the CLEC fails to correct any non-compliance with these standards or fails to demonstrate that the equipment is compliant within thirty (30) days' written notice to the CLEC, BellSouth may have the facilities or equipment removed or the condition corrected at the CLEC's expense. Removal of Microwave Collocation equipment shall be pursuant to provision 4.3 in the Collocation Agreement.

#### 10. NATURE OF USE

The CLEC equipment must comply with BellCore Network Equipment Building System (NEBS) Requirements, Electromagnetic Compatibility and Electrical Safety Generic Criteria for Network Telecommunication Equipment (TR-NWT-001089), and FCC OET Bulletin 65 dated 08/97. Requirements of provision 5.1 of the Collocation Agreement also apply. The operation of the CLEC's microwave equipment shall comply with all applicable federal and state RF guidelines.

# 11. POWER REQUIREMENTS FOR MICROWAVE ARRANGEMENT

BellSouth will not provide power or environmental support to the roof space. If BellSouth agrees in response to a specific request by the CLEC to provide power or environmental support to the roof space, the CLEC will bear all associated costs as specified by BellSouth to provide such services. In such case requirements set forth in provision 7.4 of Attachment 4 of this Agreement will apply.

#### 12. GROUNDING AND BONDING

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The CLEC at its expense will insure that any microwave equipment or Global Positioning System equipment placed on the rooftop collocation space or in the building shall be grounded and bonded according to BellSouth standards which shall be at a minimum consistent with industry standards. BellSouth agrees to provide its best efforts to approve the standard grounding runs placed in the building and that grounding and bonding requirements shall be applied at parity to itself and other interconnectors for similar types of equipment.

# 13. COLLOCATION AGREEMENT PROVISIONS

Any provision provided specifically herein shall be in addition to applicable provisions in the Collocation Agreement.

# MICROWAVE COLLOCATION RATE ELEMENT DEFINITIONS AND CONDITIONS

# Non-recurring charges - Relating to Microwave Roof Equipment

# 1) Microwave Preparation Fees

Architectural Plan and Structural Review
Permitting Review
Exterior and Related Interior Building Modification Work
General Contractor Supervision
Special Security Construction

# 2) Coring/Cable Support Structure

Electrical and Building modification work for coring Weather Proofing Cable Support Structure

# 3) Roof Preparation (if applicable)

Engineering Study (To develop roof preparation alternatives/costs)

# 4) Escort - charge for access to roof

Charge for access to Roof

#### 5) Roof Penetration (if required)

# Recurring charges - Relating to Microwave Roof Equipment

#### 1) Roof Space Lease Charge

Monthly rate for leasing rooftop or other suitable exterior space on BellSouth CO on a per square foot basis.

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# **MICROWAVE COLLOCATION RATES**

# Non-recurring charges\*

1)	Site Visit Request Fee (2 hours)	\$250.00 Per Site Visit for each CO
2)	Microwave Prep fee	[ICB FOR EACH CO]
3)	Coring/Cable Support Structure	[ICB FOR EACH CO]
4)	Roof Preparation/Exterior Cable	[ICB FOR EACH CO]
	Support Structure	
5)	Microwave Installation	[ICB FOR EACH CO]
6)	Additional Charges**	[BASED ON ICB]

- \* With the exception of Additional Charges, all Non-recurring Charges shall be assessed on an interim basis subject to true up based on a BellSouth cost study to determine the appropriate cost for such activities.
- \*\* Additional costs for environmental conditioning (if applicable) will be developed and charged as an ICB. These charges include but are not limited to (to the extent applicable): exterior cable support structure; coring; and roof reinforcement. These costs along with the building Modification costs will be pro-rated back to existing customers when new applicants are put into service.

# Monthly recurring rates\*

1) Roof space (per sq. ft.)\*\*

\$ 5.50

- \* All Recurring rates shall be assessed on an interim basis subject to true up based on a BellSouth cost study to determine the appropriate cost for such activities.
- \*\* A minimum of 12 square feet is required per microwave arrangement.